# **Booster Shutdown Planning**

- Bi-weekly Meetings & Mini-Meetings
- Created a Resource Loaded Schedule
- Coordinating with other departments (Ops. MSD etc.) and Alignment
- Participation from ES&H

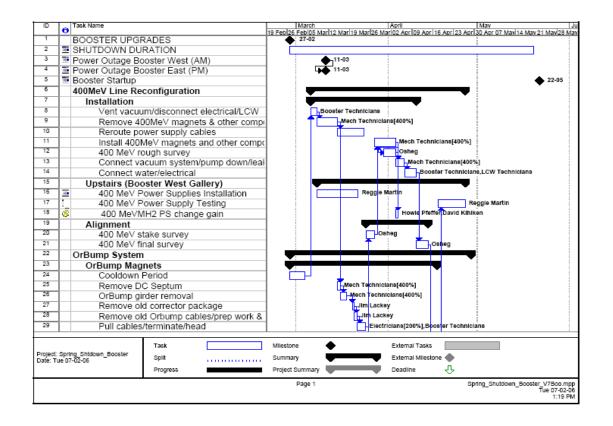
## Booster Shutdown Planning

- Started this process as a Proton Plan Activity
- As we identified the tasks, it made more sense to include all of the Booster shutdown activities in this plan
- Will only discuss the Booster activities as they relate to the Proton Plan

#### Task List for Booster

	Technical	Task Mgr.			
<u>Task</u>	<u>Manager</u>	/Cnst.Coord.	<u>Materials</u>	Resources	<u>Safety</u>
400 MeV Line Re-Configuration	Fernanda Garcia		Beam Pipe	Technicians	HA completed
OrBump System	Fernanda Garcia		Magnets, Girder	Technicians	HA completed
Dump Relocation	Bill Pellico				
Trenching		Darrell Sigmon		T&M Contract	HA completed
Excavation for conduit Run	Tom Lackowski	Tom Prosapio		Whitacker	
P.S. Relocation	Cez Jach	Greg Meyer		EE Support	
Shield Wall	Rob Reilly	Mike Mascione		Riggers	HA written
Beam Dump	Rob Reilly	Mike Mascione		Riggers	HA written
ML01 Septa Install	Rob Reilly	Mike Mascione		Riggers	HA written
Kickers Relocation		Mike Mascione		Technicians	HA written
Booster Correctors	Maurice Ball				
Modify LCW Headers	i	Craig Rogers		T&M Contract	
AC Pulsed Power Replacement	Cez Jach			Electricians, Riggers	
Generator (install & maintain)		Cliff Worby			
HV Electricians		Ron Fouch			
Electricians		Jim Ranson		T&M Contract	
Riggers	i	Greg Meyer		T&M Contract	HA written

## Resource Loaded Schedule



## During the Shutdown

- To begin: there will be a daily briefing for the workers (7:00 AM, Huddle)
  - Intended to make sure all know the daily activities and aware of any hazards
- Todd Sullivan is the Floor Manager
  - Any new tasks must have his okay
  - Keep him informed of any schedule changes

## 400 MeV Line

- This is a re-work of the existing 400 MeV line
- Closely coupled to the OrBump Project
- Will require re-locating the components and constructing new beam pipes
- Primarily a technician effort in the tunnel
- Will need a dedicated welder and machine

# OrBump Girder Assembly



- Magnets have been constructed, measured, and selected
- Shown here being fiducialized to girder
- This task looked in good shape...

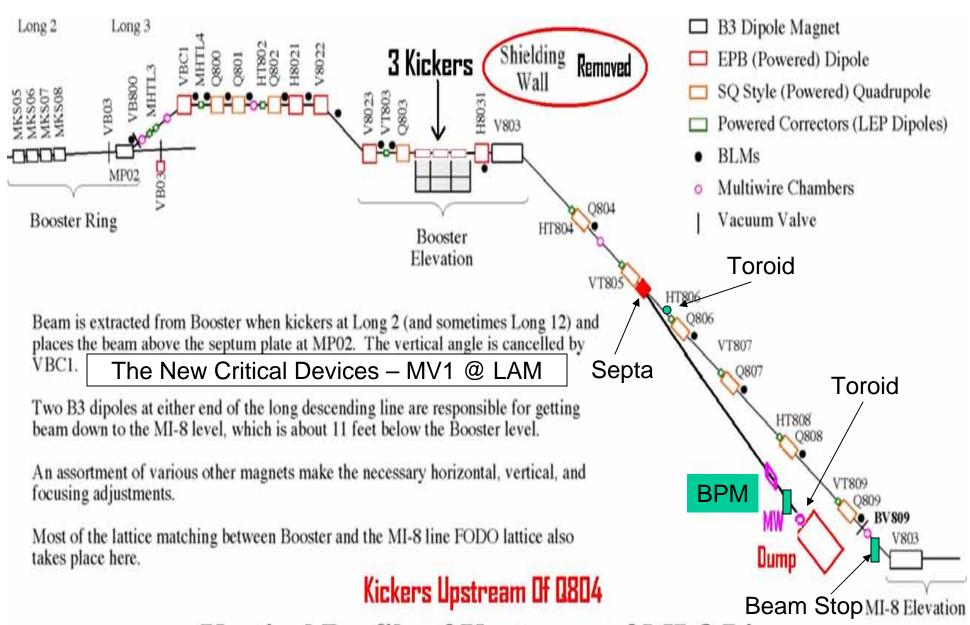
# OrBump Stripline



- Stripline shown here ready for machining
- No clear reference to find Cu surface, and the face cut removed too much material
- Repairs underway now
- Loss of two weeks will make this a tight project (schedulewise)

## **Dump Relocation**

- Most of the equipment is existing in the tunnel
- Extensive rework (remove shield wall, relocate elements)
- Large re-cabling job
- Bring in new beam dump



Vertical Profile of Upstream of MI-8 Line



#### MI -8 Dump





# Booster PP Transformer Replacement



- Replacing Transformer and Switchboard
- 13.8KV 6 Bay Rack is also being replaced
- Tight staging area
- Many trades (HV Electricians, Electricians, Crane, Riggers, Fermilab Technicians)
- Transformer failed electrical tests
- Cez Jach is witnessing a re-test this week

## Concerns

- Organizational:
  - Getting our tasks into the AD Database
    - Need to assure that the total workload is understood and keys and manpower available
  - Completing the documentation (w/ reviews)
    - ALARA's are complete
    - HA's for all tasks are being completed
- Hardware Readiness:
  - Conduit Procurement for cable run from Booster Tower to MI -8 Line
  - Stripline for the OrBumps
- 23FEB06 PP transformerted slivery reparations

## Concerns

- LCW Work
  - Install 1" LCW headers for Correctors
- RF Work
  - Maintenance
  - Center Drift Tube Cooling
- These are smaller, specific tasks, but will move all through the Booster tunnel

# Summary

- Most of the hardware is in place or readiness is understood (e.g. stripline, conduit)
- Resources are identified and receiving training as necessary
- We have a plan and everybody knows their role
- We're ready to begin!